

## **REMARKS**

In view of the above amendments and following remarks, reconsideration and further examination are requested.

### **I. Telephone Interview**

The Applicants would like to thank Examiner Henok for granting and conducting a telephone interview on March 17, 2010 in connection with the above-identified application.

During the interview, we discussed the agenda and the draft claims submitted to the Examiner on March 10, 2010 in view of the 35 U.S.C. §112, first paragraph rejection and the 35 U.S.C. § 103(a) rejection set forth in the Office Action dated October 27, 2009.

Regarding the 35 U.S.C. § 112 rejection, during the interview we explained that the disclosures of paragraphs [0031], [0034], [0035], [0066], [0084] and [0085], and Fig. 10 of the present application provide support for the limitation “the track pitch of the row of pits in the sub-information area is different from the track pitch of the row of pits in the main-information area.” Specifically, we explained that (i) paragraph [0034] discloses that the track pitch of the main-information area can be 0.24  $\mu\text{m}$  to 0.43  $\mu\text{m}$ , (ii) paragraph [0084] discloses that the track pitch of the sub-information area can be 0.24  $\mu\text{m}$  to 0.45  $\mu\text{m}$ , (iii) paragraph [0066] and Fig. 10 teach that a small deviation in track pitch, such as 0.02  $\mu\text{m}$  will cause a large change in the defocus margin, and (iv) paragraph [0085] merely mentions that it is preferable for the track pitch of the main-information area and the sub-information area to be equal, and mentions that when the track pitches of the main-information area and the sub-information area are largely different, then the rotational speed has to be changed.

We then explained that these above-mentioned disclosures (i) – (iii) provide support for the track pitches of the main-information area and the sub-information area being different, even on a small scale, and we explained that the above-mentioned disclosure (iv) in no way prohibits the track pitches of the main-information area and the sub-information area from being different. We also emphasized that the disclosure of paragraph [0066], which states that small differences between the track pitch of the row of pits in the main-information area and the sub-information area cause a large change in the defocus margin, explains the importance of small differences in the track pitches of the main-information area and the sub-information area.

In view of the above, we submitted to the Examiner that the above-mentioned disclosures provided clear support for the claimed limitations regarding the differences in the track pitch. The Examiner agreed with our position.

Next, we discussed the prior art rejection. The Examiner kindly agreed that the prior art of record does not disclose or suggest that the track pitch of the sub-information area is different from the track pitch of the main-information area. As a result, the Examiner indicated that, if the claims are amended accordingly, then the prior art rejection would most likely be overcome.

## **II. Amendments to the Claims**

Based on the above-mentioned interview, new claims 45-47 have been added to overcome the rejections cited by the Examiner in the Office Action of October 27, 2009. As discussed above in Section I, support for these amendments can be found, at least, in paragraphs [0031], [0034], [0035], [0066], [0084] and [0085], and Fig. 10 of the present application.

Claims 1-44 have been cancelled without prejudice or disclaimer of the subject matter recited therein.

### **III. 35 U.S.C. § 112, First Paragraph Rejection**

As previously mentioned, claims 21 and 41 were rejected under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement. Specifically, claims 21 and 41 were rejected for reciting “the track pitch of the row of pits in the sub-information area is different from a track pitch of the row of pits in the main information area,” for which there is allegedly no supporting disclosure in the original specification. This rejection is believed to be inapplicable to new claims 45-47 for the following reasons.

As discussed above in section III, paragraphs [0034] [0066], [0084] and [0085], and Fig. 10 of the present application provide support for the limitation “the track pitch of the row of pits in the sub-information area is different from the track pitch of the row of pits in the main-information area,” as now recited in new claim 45. As a result, withdrawal of this rejection is respectfully requested.

### **IV. 35 U.S.C. § 103(a) Rejection**

Claims 21 and 41 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Hiroaki et al. (JP 2001-229542) and Miyagawa (U.S. 7,142,496). This rejection is believed clearly inapplicable to new claims 45-47 for the following reasons.

New claim 45 recites a method of manufacturing an optical recording medium, wherein the optical recording medium includes a main-information where a row of pits is formed as main data, and includes a sub-information area in which medium identification information is to be recorded. In addition, claim 45 recites that the method of manufacturing the optical recording medium includes setting a range of a track pitch of the row of pits in the main-information area,

setting a range of a track pitch of the row of pits in the sub-information area, and forming a track in the sub-information area and the main-information area. Finally, claim 45 recites that the track pitch in the main-information area is at least 0.24  $\mu\text{m}$  wide and at most 0.43  $\mu\text{m}$  wide, the track pitch in the sub-information area is at least 0.24  $\mu\text{m}$  and at most 0.45  $\mu\text{m}$  wide, and the track pitch of the row of pits in the sub-information area is different from the track pitch of the row of pits in the main-information area. Hiroaki and Miyagawa, or any combination thereof fails to disclose or suggest the above-mentioned distinguishing features as required by claim 45, for the following reasons.

As agreed upon during the above-mentioned telephone interview, Hiroaki merely teaches than an information recording medium includes a sub-information area and Miyagawa merely teaches that the track pitch of the main-information recording area is specifically 0.32  $\mu\text{m}$ . Thus, in view of the above and as agreed upon during the telephone interview, the combination of Hiroaki and Miyagawa fails to disclose or suggest that the track pitch in the main-information area is at least 0.24  $\mu\text{m}$  wide and at most 0.43  $\mu\text{m}$  wide, the track pitch in the sub-information area is at least 0.24  $\mu\text{m}$  and at most 0.45  $\mu\text{m}$  wide, and the track pitch of the row of pits in the sub-information area is different from the track pitch of the row of pits in the main-information area, as required by claim 45.

Furthermore, it is noted that the above-mentioned rejection indicates that it would have been obvious to modify the track pitch of the sub-information area, as disclosed in Hiroaki, according to Miyagawa, because it would be preferable to make the track pitch in the main-information area equal to the track pitch in the sub-information area. However, even if the track pitch in the sub-information area is set at 0.32  $\mu\text{m}$  in accordance with the track pitch in the main-information area, Miyagawa and Hiroki, or any combination thereof, still fails to disclose or

suggest that the track pitch in the main-information area is at least 0.24  $\mu\text{m}$  wide and at most 0.43  $\mu\text{m}$  wide, the track pitch in the sub-information area is at least 0.24  $\mu\text{m}$  and at most 0.45  $\mu\text{m}$  wide, and the track pitch of the row of pits in the sub-information area is different from the track pitch of the row of pits in the main-information area, as required by claim 45.

In other words, the Applicants note that it would not have been obvious to one of ordinary skill in the art to require the track pitch of the main-information area and the track pitch sub-information area to be different, and to set the track pitch of the sub-information area to at least 0.24  $\mu\text{m}$  wide and at most 0.45  $\mu\text{m}$  wide, because a person of ordinary skill in the art would not recognize the specific problems in an optical recording medium which has a plurality of reflection-film removed areas formed by partially removing a metal reflection film.

In addition, if Miyagawa were to teach shortening the track pitch in order to improve the recording density, a person of ordinary skill in the art who follows the teaching of Miyagawa would shorten the track pitch of the main-information area and the sub-information area as much as possible for the improvement of the recording density so as to make the track pitch of the sub-information area remain consistent with that of the main-information area. Accordingly, Miyagawa does not teach that the track pitch of the sub-information area is different from that of the main information area, as required by claim 45.

In summary, it would not have been obvious to one of ordinary skill in the art to (i) set the track pitch in the main-information area to at least 0.24  $\mu\text{m}$  wide and at most 0.43  $\mu\text{m}$  wide, (ii) set the track pitch in the sub-information area to at least 0.24  $\mu\text{m}$  and at most 0.45  $\mu\text{m}$  wide, and (iii) set the track pitch of the row of pits in the sub-information area to be different from the track pitch of the row of pits in the main-information area, as required by claim 45, because neither Hiroaki nor Miyagawa recognize the specific problems (solved by the present invention)

in an optical recording medium which has a plurality of reflection-film removed areas formed by partially removing a metal reflection film.

Therefore, because of the above-mentioned distinctions it is believed clear that claim 45 and claims 46 and 47 that depend therefrom would not have been obvious or result from any combination of Hiroaki and Miyagawa.

Additionally, there is no disclosure or suggestion in Hiroaki and/or Miyagawa or elsewhere in the prior art of record which would have caused a person of ordinary skill in the art to modify Hiroaki and/or Miyagawa to obtain the invention of independent claim 45. Accordingly, it is respectfully submitted that independent claim 45 and claims 46 and 47 that depend therefrom are clearly allowable over the prior art of record.

### **III. Conclusion**

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance and an early notification thereof is earnestly requested. The Examiner is invited to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,

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